TESLA
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IS YOUR BUILDING DESIGN WORKING WITH OR AGAINST THE SUN?

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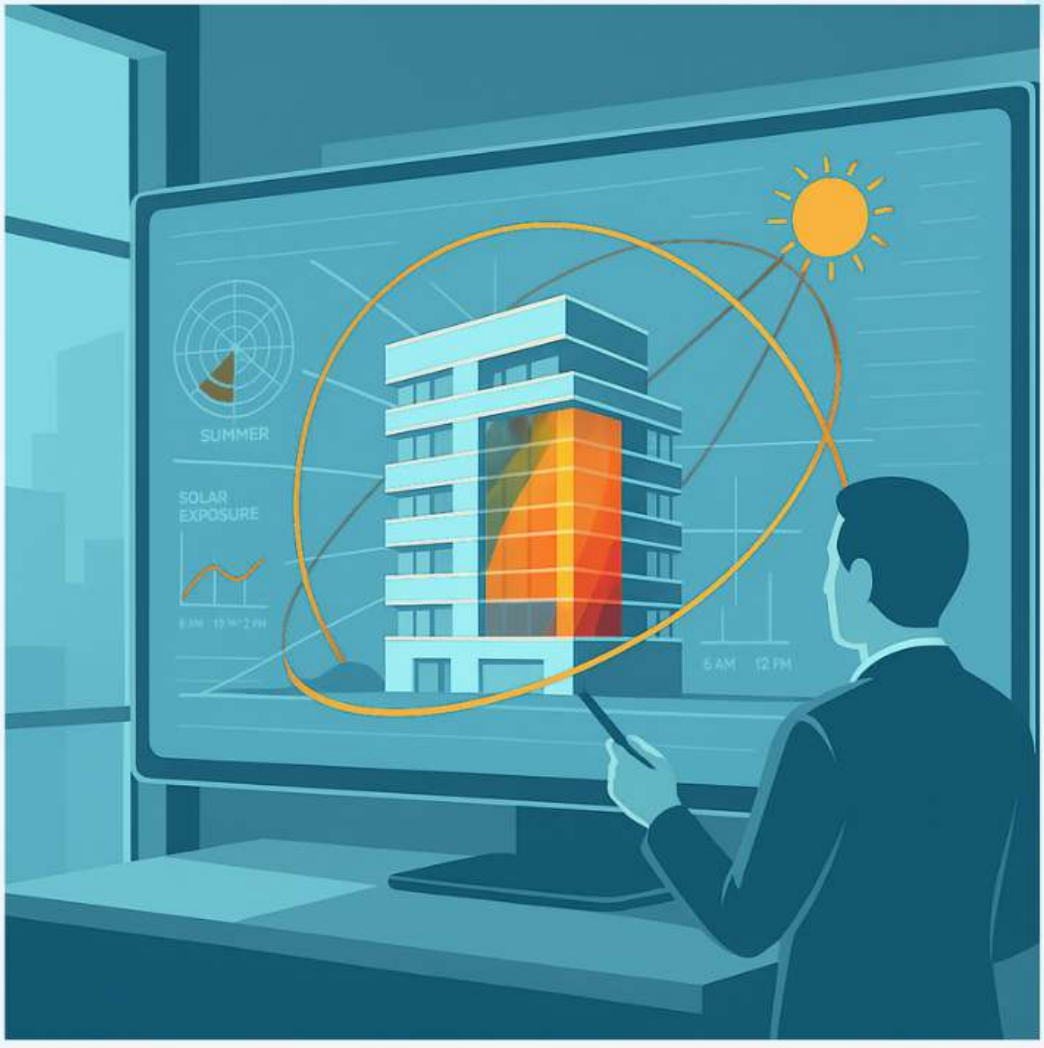
Daylight and solar analysis in BIM can be the game-changer that turns your design into an energy-efficient icon—or leaves it as a missed opportunity.

WHAT IS DAYLIGHT AND SOLAR ANALYSIS IN BIM?

It’s the use of Building Information Modeling tools to study how natural light and solar energy interact with your building—across hours, days, and seasons.



WHY IT MATTERS

Improves comfort for occupants

Guides smarter choices in materials and shading

Cuts reliance on artificial lighting

Boosts overall energy efficiency

TOOLS THAT MAKE IT HAPPEN

Top BIM tools for daylight and solar analysis:

- Autodesk Revit + Insight
- Rhino + Ladybug Tools
- IES VE
- ArchiCAD EcoDesigner

These simulate light behavior, solar gain, and energy impact on your design.

ESSENTIAL TYPES OF ANALYSIS

- Solar radiation – how sunlight hits building surfaces
- Daylight factor – interior natural light levels
- Shadow studies – patterns of shade over time
- Glare & reflection – balancing brightness and comfort

DRIVING DESIGN DECISIONS

From façade orientation to strategic window placement and shading systems—daylight and solar analysis equips designers to create smarter, healthier environments.

ALIGNED WITH SUSTAINABILITY GOALS

Integrating solar analysis early supports:

- LEED, BREEAM, and WELL certifications
- Lower carbon emissions
- Data-backed passive design approaches

FUTURE-READY DESIGN STARTS HERE

Daylight and solar analysis powered by BIM isn't just a design feature—it's a must-have for creating high-performance buildings in a climate-aware world.